

## MULTI-LAYER DISPLAY 3D SERVER BASED PORTALS

### CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims priority to U.S. Provisional Patent Application No. 60/858,741, filed on Nov. 13, 2006, which is incorporated herein by reference in its entirety and for all purposes.

[0002] This application claims priority and is a continuation-in-part of U.S. patent application Ser. No. 11/595,774, entitled "Method and Apparatus for Integrating Remotely-Hosted and Locally Rendered Content on a Gaming Device" (Attorney Docket No. IGT1P334/P-1221B) and filed on Nov. 10, 2006, which claims priority under 35 U.S.C. § 119(e) from U.S. Provisional Patent Application No. 60/792,082, filed Apr. 13, 2006, naming Little, et al., as inventors, and titled "Remote Content Management and Resource Sharing on a Gaming Machine," and from U.S. Provisional Patent Application No. 60/822,859, filed Aug. 18, 2006, naming Little, et al., as inventors, and titled "Remote Content Management and Resource Sharing on a Gaming Machine and Method of Implementing same," each of which is incorporated herein by reference in their entirety and for all purposes.

[0003] This application is related to U.S. application Ser. No. 11/858,700, entitled, "MECHANICAL REEL HARDWARE SIMULATION USING MULTIPLE LAYER DISPLAYS," filed Sep. 20, 2007, by Williams, et al., which is incorporated herein in its entirety and for all purposes.

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### TECHNICAL FIELD

[0005] The present invention relates generally to wager based gaming machines, and more specifically to the multimedia emulation of physical reel hardware on processor-based gaming machines including remote content management on a gaming machine with layered displays.

### BACKGROUND

[0006] Traditional mechanical and electromechanical reel gaming machines, often referred to as "stepper" machines, arrange a number of rotating mechanical reels behind a fixed glass layer. As technology in the gaming industry progresses, the traditional mechanically driven reel slot machines are being replaced by electronic machines having an LCD video display or the like. Processor-based gaming machines are becoming the norm. One reason for their increased popularity is the nearly endless variety of games that can be implemented using processor-based technology. The processor-based gaming machines permit the operation of more complex games, incorporate player tracking, improve security, permit wireless communications, and add a host of digital features that are not possible on mechanical-driven gaming machines. The increasing cost of designing, manufacturing, and maintaining complex mechanical gaming machines has also motivated casinos and the gaming industry to abandon these older machines.

[0007] While existing designs and systems for providing realistic reel games on processor-based gaming machines, and particularly the presentation of spinning reels on the video displays thereof, have been adequate in the past, improvements are usually welcomed and encouraged. For instance, gaming entity may provide gaming services to tens of thousands of users. For instance, a single land-based casino may include thousands of gaming machines. Player's gaming interests are constantly changing and the effort associated with providing fresh content to users is quite costly. The ability of a casino operator to maximize their operating profits and keep their customers happy is directly linked to their ability to provide new and desirable gaming content. In view of the above, it would be desirable to provide gaming apparatus and method that reduce the costs associated with providing new gaming content on gaming devices.

### SUMMARY

[0008] The present invention provides a processor-based gaming machine with layered displays. The layered displays include a front screen and back screen that provide actual physical separation between visual representations on the front and back screens; the separation mimics the actual distance seen between a glass layer and mechanical reels in a traditional mechanical stepper gaming machine. This distance between video screens also provides parallax and increases the ability of a processor-based gaming machine to realistically emulate older mechanical reel gaming machines.

[0009] Other methods, features and advantages of the invention will be or will become apparent to one with skill in the art upon examination of the following figures and detailed description. It is intended that all such additional methods, features and advantages be included within this description, be within the scope of the invention, and be protected by the accompanying claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1A shows a simple depiction of perspective viewing of a gaming machine with mechanical reels.

[0011] FIG. 1B shows a simple depiction of changing position in front of a mechanical reel gaming machine with windows on a front panel and the effect of changing position on visibility of a rear video display device.

[0012] FIG. 1C shows a simple depiction of perspective for curved mechanical reels when viewing from in front of a mechanical reel gaming machine.

[0013] FIG. 1D shows a fore-lighting technique used in some mechanical reel gaming machines with opaque reel strips.

[0014] FIG. 2A shows video output on layered displays and configured to realistically simulate mechanical reels in accordance with one embodiment.

[0015] FIG. 2B shows the video output of FIG. 5A separated into front and back video for display on front and back displays, respectively, in accordance with one embodiment.

[0016] FIG. 2C illustrates the video data output on rear video display device of FIG. 2B in greater detail in accordance with a specific embodiment.

[0017] FIG. 3A shows a video reel strip with slight curvature on its lateral sides in accordance with one embodiment.

[0018] FIG. 3B shows a graphical simplification of perspective video adaptations applied to reel symbols sides in accordance with one embodiment.